WHAT IS CLAIMED IS:

1	1.	A nucleic acid array, wherein each coordinate of the array contains	
2	a single nucleic acid species, which nucleic acid species has a sequence of a Xenopus		
3	embryonic gene prod	luct set forth in Appendix 1, or the complement thereof, or a	
4	hybridizable fragmer	nt thereof consisting of not less than 20 contiguous nucleotides from	
5	the sequence.		
1	2.	The nucleic array of claim 1 comprising all of the sequences from	
2	Appendix 1.		
1	3.	The nucleic acid array of claim 1 wherein the nucleic acids are	
2	cDNAs.		
1	4.	The nucleic acid array of claim 1 wherein the nucleic acids are	
2	oligonucleotides.		
1	5.	The nucleic acid array of claim 1, wherein the array is supported	
2	on a solid support se	elected from the group consisting of a glass slide and a silicon chip.	
3			
4	6.	An isolated nucleic acid comprising a sequence corresponding to	
5	or complementary to a sequence of not less than 20 contiguous nucleotides of any one		
6	the sequences of Appendix 1.		
1	7.	The nucleic acid of claim 6 wherein the sequence consists of the	
2	sequence of Appendix 1, or the complement thereof.		

1		8.	The nucleic acid of claim 6 wherein the sequence lacks any
2	homology to a	ı knowr	sequence as set forth in the list in Appendix 1.
1		9.	Method for detecting differential expression of embryonic genes,
2	which method	l compr	
3			(a) contacting a nucleic acid array comprising one or more genes
4	expressed in embryonic cells but not in mature cells with a sample nucleic acid		
5	preparation and a control nucleic acid preparation, wherein the sample nucleic acid		
6	preparation and control nucleic acid preparation contain nucleic acids expressed by		
7	sample cells and control cells, respectively, and		
8			(b) detecting differential hybridization of nucleic acids from
9	sample cells relative to control cells to nucleic acids in the array.		
1		10.	The method according to claim 9 wherein the sample nucleic acids
2	are mRNAs.		
1		11.	The method according to claim 9, wherein the sample nucleic acids
2	are cDNAs pr	roduced	by reverse transcriptase-polymerase chain reaction (RT-PCR).
1		12.	The method according to claim 11, wherein the sample nucleic
2	acid preparati	ion and	the control nucleic acid preparation are each labeled with different
3	labels.		
1		13.	The method according to claim 12, wherein the sample nucleic
2	acids are labe		h fluorescent tags.
2			
1		14.	The method according to claim 9, wherein the array is supported
2	on a colid cur		elected from the group consisting of a glass slide and a silicon chip.
3	on a some suj	opore se	Total Town are Stock commence of the

1	15.	The method according to claim 9, wherein the sample cells are at a
2	different developmen	ntal point during embryogenesis relative to the control cells.
1	16.	The method according to claim 9, wherein the sample cells are
2	located in a different	region of an embryo compared to the control cells.
1	17.	The method according to claim 9, wherein the sample cells are
2	contacted with an external stimulus and the control cells are contacted with a sham	
3	stimulus or no stimu	lus.
1	18.	The method according to claim 17, wherein the cells are contacted
2	with a gene encoding	g a known gene product.
1	19.	The method according to claim 17, wherein the cells are contacted
2	with a gene encoding	g an unknown gene product.
1	20.	The method according to claim 17, wherein the sample cells are
2	contacted with a dru	g.
1	21.	The method according to claim 17, wherein the sample cells are
2	contacted with an environmental toxin.	
1	22.	The method according to claim 17, wherein the sample cells are
2	irradiated.	
1	23.	The method according to claim 9, wherein the nucleic acid array
2	contains one or mor	re sequences from Appendix 1.

24. Method for detecting defects in development, which method
comprises contacting nucleic acids from test cells undergoing development with a nucleic
acid array of gene products known to play a fundamental role in the development process
and detecting a difference in expression of a fundamental gene in the sample cells relative
to a standard.

- 25. The method according to claim 24, wherein the standard is a standard derived from expression in a normal cell.
- 26. The method according to claim 24, wherein the nucleic acid array comprises one or more sequences as set forth in Appendix 1, or the complement thereof, or a hybridizable fragment thereof.
- 27. The method according to claim 24, wherein a difference in gene expression in test cells relative to normal cells is indicative of a developmental defect.